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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,198	07/10/2003	Kenya Uomori	5077-069/DVA	3517
27572	7590	10/20/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			CHOI, JACOB Y	
P.O. BOX 828			ART UNIT	
BLOOMFIELD HILLS, MI 48303			PAPER NUMBER	
			2875	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

EL

Office Action Summary	Application No. 10/617,198	Applicant(s) KENYA UOMORI	
	Examiner Jacob Y. Choi	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 1-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

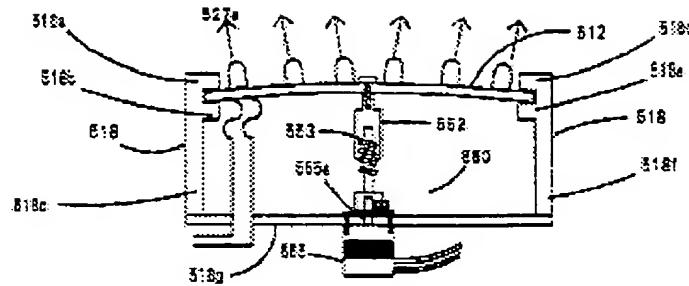
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 21 & 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Belliveau (USPN 6,357,893).

Regarding claim 21, Belliveau discloses a plurality of light sources (e.g., 112a-112f) arranged therein, being operable to project a desired light pattern (127) according to control of a light emitting state of each of the plurality of light sources by a light source controller (e.g., column 2, lines 45-55), wherein the plurality of light sources are arranged in an array on a flat surface (e.g., 122) with optical axes thereof disposed radially (e.g., Figure 3A-C) toward an object, and the optical axes of light sources in a linear group are radially disposed outward in a common plane (e.g., Figure 2B)



In order to be given patentable weight, a functional recitation must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.C. 172; 388 O.G. 279.

Regarding claim 23, Belliveau discloses a plurality of light sources, each of the light source defining an optical axis that extends from a surface, the light source operable to project a desired light pattern, and a light source controller that controls a light emitting state of the each of the light sources, wherein the surface is curved and the optical axis of the each of the light source extends in a direction that is about normal to the surface.

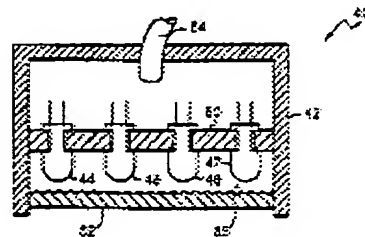
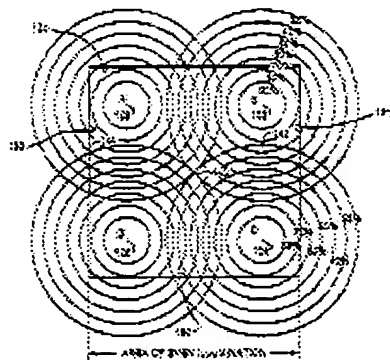
3. Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by King et al. (USPN 5,828,449).

Regarding claim 21, King et al. discloses a plurality of light sources (e.g., 50) arranged therein, being operable to project a desired light pattern (e.g., 25 & 26) according to control of a light emitting state of each of the plurality of light sources by a

light source controller, wherein the plurality of light sources are arranged in an array on a flat surface (e.g., 62 & 64) with optical axes thereof disposed radially toward an object (e.g., 12, 14, & 18), and the optical axes of light sources in a linear group are radially disposed outward in a common plane (e.g., 52 & 54).

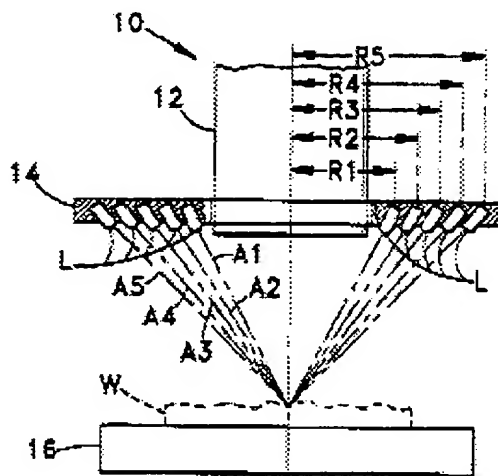
4. Claim 22 is rejected under 35 U.S.C. 102(b) as being anticipated by Thrailkill (USPN 5,822,053).

Regarding claim 22, Thrailkill discloses a plurality of light sources (e.g., 44-47) arranged therein, being operable to project a desired light pattern (e.g., 102-104) according to control of a light emitting state of each of the plurality of light sources by a light source controller (e.g., 16), wherein a projection range is divided into a plurality of ranges in a direction for forming the light pattern, and groups of light sources respectively covering the plurality of divided ranges (e.g., 130-133) are aligned in a direction perpendicular to the direction for forming the light pattern.



5. Claim 24 is rejected under 35 U.S.C. 102(b) as being anticipated by Polidor et al. (USPN 5,690,417).

Regarding claim 24, Polidor et al. discloses a plurality of light sources defining an array, each of the light sources (L) defining an optical axis that extends from a surface, the light sources operable to project a desired light pattern (A1-A5), the light pattern having a center axis (e.g., Figure 1), and a light source controller (microprocessor/controller; e.g., Figure 5-6) that controls a light emitting state of the each of the light sources, wherein the optical axes are canted at a plurality of respective angles relative to the center axis, the angels progressively changing relative to the center axis based on a position in the array.



Response to Preliminary Amendment

6. Examiner acknowledges that the applicant has withdrawn claims 1-20 and amended claims 21 & 22. Claims 23 & 24 are newly added. Therefore, claims 21-22 are pending in this application.

Response to Arguments

7. Applicant's arguments with respect to claims 21-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Burnett (USPN 6,850,637) – lighting arrangement for automated optical inspection system

Johnson, II (USPN 5,580,163) focusing light source with flexible mount for multiple light-emitting elements

Luk (USPN 6,098,214) – variable beam LED light source system

Koch et al. (USPN 5,038,258) – illuminating arrangement for illuminating an object with incident light

Arnold (USPN 4,893,223) – illumination devices for inspection systems

Tait et al. (USPN 6,598,994) – multi-angle inspection of manufactured products

Reinbach (USPN 6,450,663) – light-emitting-diode arrangement

Chen (USPN 6,659,632) – light emitting diode lamp

Yoneda (USPN 6,070,986) – method of manufacturing a lighting unit for inspecting a surface

Patel et al. (USPN 6,191,541) – solid state tail light for aircraft

Cote et al. (USPN 6,244,728) – light emitting diode assembly for use as an aircraft position light

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC



JOHN ANTHONY WARD
PRIMARY EXAMINER